

In the Claims:

Please amend the claims as follows.

1. (Currently Amended) A process ~~Process~~ for producing an absorbent polymer comprising the steps of:
 - a first mixing event, ~~in which~~ wherein a plurality of absorbent polymer particles are mixed with a liquid in a mixer[,]; and
 - a second mixing event, ~~in which~~ wherein the liquid is distributed within the polymer particles[,];
 - wherein the polymer particles in the first mixing event are mixed with a speed such that the kinetic energy of the individual polymer particles is on average larger than the adhesion energy between the individual polymer particles, and the polymer particles in the second mixing event are stirred with a lower speed than in the first mixing event[,]; and
 - wherein the first mixing event is a continuous mixing process.
2. (Currently Amended) The process ~~Process~~ according to claim 1, wherein in the first mixing event the polymer particles are back-mixed in such a way that a flow of the new polymer particles entering in the mixer is overlaid by a flow of polymer particles already present in the mixer and opposed to this flow.
3. (Currently Amended) The process ~~Process~~ according to claim 2, wherein the ratio of the opposed flow to the flow of newly entering polymer particles averages about 5 to about 50 % by wt.
4. (Currently Amended) The process ~~Process~~ according to claim 1 ~~one of the preceding claims, characterized in that~~ wherein before the first mixing event the absorbent polymer particles have been secondary cross-linked in the surface portion and have

been brought into contact with a composition comprising an Al^{3+} ion before the secondary cross-linking.

5. (Currently Amended) The process ~~Process~~ according to claim 1 ~~one of the preceding~~ ~~claims, characterized in that wherein~~ the average speed of the polymer particles in the first mixing event amounts to between about 8 and about 80 m/sec, ~~in particular between 15 m/sec and 60 m/sec, preferably between 20 and 30 m/sec, and/or the speed of the polymer particles in the second mixing process amounts to under 3 m/sec, in particular under 0.3 m/sec, preferably under 0.03 m/sec.~~
6. (Currently Amended) The process ~~Process~~ according to claim 1 ~~one of the preceding~~ ~~claims, characterized in that wherein~~ the Froude number in the first mixing event amounts to between about 1 and about 50, ~~in particular between 1.5 and 40, preferably between 1.7 and 33, and/or in the second mixing event amounts to between 0.001 and 1, in particular between 0.01 and 0.2, preferably between 0.08 and 0.03.~~
7. (Currently Amended) The process ~~Process~~ according to claim 1 ~~one of the preceding~~ ~~claims, characterized in that wherein~~ a back-mixing from about 10% to about 30% occurs.
8. (Currently Amended) The process ~~Process~~ according to claim 1 ~~one of the preceding~~ ~~claims, characterized in that wherein~~ the average residence time of the first mixing event amounts to between about 5 and about 200 sec, ~~in particular between 10 and 100 sec, preferably between 20 and 60 sec.~~
9. (Currently Amended) The process ~~Process~~ according to claim 1 ~~one of the preceding~~ ~~claims, characterized in that wherein~~ for a safe blending the static pressure build up during the first mixing event amounts to less than about 0.1 bar, ~~in particular less than 0.05 bar, preferably less than 0.01 bar.~~

10. (Currently Amended) ~~The process~~ Process according to claim 1 ~~one of the preceding claims, characterized in that~~ wherein water or aqueous solution is added as liquid.
11. (Currently Amended) ~~The process~~ Process according to claim 10, ~~characterised in that~~ wherein the liquid comprises additives, ~~in particular alcohols.~~
12. (Currently Amended) ~~The process~~ Process according to claim 1 ~~one of the preceding claims, wherein the polymer particles are based on:~~
- (α1) about 0.1 to about 99.999 wt.% polymerized ~~polymerised~~, ethylenically unsaturated, acidic group-containing monomers containing a protonated or a quaternary nitrogen, or mixtures thereof,
 - (α2) 0 to about 70 wt.% of polymerized ~~polymerised~~, ethylenically unsaturated monomers which can be co-polymerized ~~co-polymerised~~ with (α1),
 - (α3) about 0.001 to about 10 wt.% of one or more cross-linkers,
 - (α4) 0 to about 30 wt.% of water soluble polymers, as well as
 - (α5) 0 to about 20 wt.% of one or more additives, wherein the sum of the component weights (α1) to (α5) amounts to 100 wt.%.
13. (Currently Amended) ~~The process~~ Process according to claim 1 ~~one of the preceding claims, wherein the polymer particles have at least one of the following properties:~~
- (A) the maximum absorption of 0.9 wt.% NaCl solution is within a range from at least about 10 to about 1000 g/g SAP granulate,
 - (B) the part extractable with 0.9 wt.% aqueous NaCl solution amounts to less than about 30 wt.%, based on the SAP granulate,
 - (C) the bulk density is within a range from about 300 to about 1000 g/l,

(D) the pH value for 1 g of the SAP granulate in 1 l water is within a range from about 4 to about 10,

(E) the CRC value is within a range from about 10 to about 100 g/g,

(F) the AAP value under a pressure of 0.7 psi is within a range from about 10 to about 60 g/g,

(G) the AAP value under a pressure of 0.3 psi is within a range from about 10 to about 100 g/g.

14. (Currently Amended) An absorbent ~~Absorbent~~ polymer obtainable by a process according to claim 1 ~~one of the preceding claims~~.

15. (Currently Amended) An absorbent polymer comprising water in a quantity within the range from about 0.1 to about 20 wt.% based on the total weight of the absorbent polymer, which has at least one of the following properties:

(A1) an AAP value under a pressure of 0.7 psi (50 g/cm²) within a range from about 10 to about 60 g/g,

(B1) an AAP value under a pressure of 0.3 psi (20 g/cm²) within a range from about 10 to about 100 g/g,

(C1) a CRC value within a range from about 10 to about 100 g/g,

(D1) a drop of the AAP value under a load of 0.7 psi of less than about 20% after a deterioration through mechanical stress,

(E1) in a composite of 50 wt.% of the absorbent polymer, 47.5 wt.% cellulose fibres and 2.5 wt.% of a two-component fibre of polypropylene and polyethylene an absorption time ~~determined according to the test methods described herein~~ after a first wetting of less than about 53 seconds,

(F1) in a composite of 50 wt.% of the absorbent polymer, 47.5 wt.% cellulose fibres and 2.5 wt.% of a two-component fibre of polypropylene and polyethylene an absorption time ~~determined according to the test methods described herein~~ after a second wetting of less than about 253 seconds,

(G1) in a composite of 50 wt.% of the absorbent polymer, 47.5 wt.% cellulose fibres and 2.5 wt.% of a two-component fibre of polypropylene and polyethylene an absorption time ~~determined according to the test methods described herein~~ after a third wetting of less than about 475 seconds,

(H1) in a composite of 50 wt.% of the absorbent polymer, 47.5 wt.% cellulose fibres and 2.5 wt.% of a two-component fibre of polypropylene and polyethylene a rewet value ~~determined according to the test methods described herein~~ of less than about 12.55 g/g,

wherein the water is homogeneously distributed within the absorbent polymer.

16. (Currently Amended) A composite ~~Composite~~, comprising an absorbent polymer according to claim 14 ~~or 15~~ and a substrate.
17. (Currently Amended) A process ~~Process~~ for producing a composite, wherein an absorbent polymer according to claim 14 ~~or 15~~ and a substrate and optionally an additive are brought into contact with each other.
18. (Currently Amended) A composite ~~Composite~~ obtainable by a process according to claim 17.
19. (Currently Amended) Chemical products[,] comprising the absorbent polymer according to claim 14 ~~or 15 or the composite according to claim 16 or 18~~.

20. (Currently Amended) Use of the absorbent polymer according to claim 14 ~~or 15 or of the composite according to claim 16 or 18~~ in chemical products.
21. (New) The process according to claim 5 wherein the speed of the polymer particles in the second mixing process amounts to under about 3 m/sec.
22. (New) The process according to claim 1 wherein the Froude number in the second mixing event amounts to between about 0.001 and about 1.